

CLAIMS

1. (Original) A data processor for reading and writing data from/on a storage medium, the storage medium having
5 stored thereon a first data stream being represented by a video signal that has been encoded by a first encoding process,

the data processor comprising:

a controller for acquiring first playlist information
10 which is used to manage playback of the first data stream;

a stream generating section for generating a second data stream by encoding the video signal by a second encoding process, which is different from the first encoding process;
and

15 a management section for producing second playlist information based on the second data stream and the first playlist information so as to manage an order in which the second data stream is played back.

20 2. (Original) The data processor of claim 1, further

comprising a first storage section for storing the first data stream on the storage medium and a second storage section for storing the second data stream on another storage medium,

wherein the stream generating section generates the first and second data streams in parallel.

3. (Original) The data processor of claim 2, wherein the stream generating section generates the first and second data streams such that each said stream includes a plurality of data streams.

4. (Original) The data processor of claim 2, wherein the controller acquires the first playlist information that includes stream identifying information, which identifies each of more than one stream included in the first data stream, and range information, which specifies the playback range of each said stream, and

wherein from the stream identifying information and the range information, the management section produces the second playlist information that includes stream identifying

information, which identifies an associated one of more than one stream included in the second data stream, and range information, which specifies the playback range of each said stream.

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5. (Original) The data processor of claim 4, wherein the controller acquires the first playlist information that specifies a playback effect on the first data stream, and

wherein the management section produces the second
10 playlist information that specifies another playback effect, which is different from the playback effect on the first data stream, for the second data stream.

6. (Original) The data processor of claim 5, wherein the
15 management section specifies the playback effect on the second data stream according to the type of the playback effect on the first data stream.

7. (Original) The data processor of claim 4, wherein
20 each said range information included in the first and second

playlist information designates an I-picture, compliant with an MPEG standard, as a start position of the playback range.

8. (Original) The data processor of claim 7, further
5 comprising an encoding control section for giving an instruction on how to generate I-pictures compliant with the MPEG standard,

wherein in accordance with the instruction of the encoding control section, the stream generating section
10 generates the first and second data streams such that each pair of I-pictures in the first and second data streams are associated with the same video picture.

9. (Original) The data processor of claim 2, further
15 comprising an image pickup section for acquiring the video signal and a microphone for acquiring an audio signal,

wherein the stream generating section generates the first and second data streams such that each said stream further includes the audio signal.

10. (Original) The data processor of claim 1, further comprising:

a commanding section for receiving an instruction on the playback order of the first data stream, and

5 a writing section for writing the first playlist information, the second data stream and the second playlist information on the storage medium,

wherein the controller produces the first playlist information in accordance with the instruction, and the
10 stream generating section generates the second data stream based on the first data stream.

11. (Original) A data processing method for reading and writing data from/on a storage medium, the storage medium
15 having stored thereon a first data stream being represented by a video signal that has been encoded by a first encoding process,

the method comprising steps of:

acquiring first playlist information which is used to
20 manage playback of the first data stream;

generating a second data stream by encoding the video signal by a second encoding process, which is different from the first encoding process; and

producing second playlist information based on the second data stream and the first playlist information so as to manage an order in which the second data stream is played back.

12. (Original) The data processing method of claim 11, further comprising steps of:

generating the first data stream in parallel with the second data stream;

storing the first data stream on the storage medium; and

storing the second data stream on another storage medium.

13. (Original) The data processing method of claim 12, wherein the step of generating the first data stream includes generating the first data stream such that the first data stream includes a plurality of data streams, and

wherein the step of generating the second data stream

includes generating the second data stream such that the second data stream includes a plurality of data streams.

14. (Original) The data processing method of claim 12,
5 wherein the step of acquiring the first playlist information includes acquiring the first playlist information that includes stream identifying information, which identifies each of more than one stream included in the first data stream, and range information, which specifies the playback range of each
10 said stream, and

wherein the step of producing the second playlist information includes producing the second playlist information that includes stream identifying information, which identifies an associated one of more than one stream included in the
15 second data stream, and range information, which specifies the playback range of each said stream, from the stream identifying information and the range information.

15. (Original) The data processing method of claim 14,
20 wherein the step of acquiring the first playlist information

includes acquiring the first playlist information that specifies a playback effect on the first data stream, and

wherein the step of producing the second playlist information includes producing the second playlist information that specifies another playback effect, which is different from the playback effect on the first data stream, for the second data stream.

16. (Original) The data processing method of claim 15, wherein the step of producing the second playlist information includes producing the second playlist information by specifying the playback effect on the second data stream according to the type of the playback effect on the first data stream.

17. (Original) The data processing method of claim 14, wherein each said range information included in the first and second playlist information designates an I-picture, compliant with an MPEG standard, as a start position of the playback range.

18. (Original) The data processing method of claim 17,
further comprising a step of giving an instruction on how to
generate I-pictures compliant with the MPEG standard,

5 wherein the step of generating the first data stream and
the step of generating the second data stream include
generating the first and second data streams in accordance
with the instruction such that each pair of I-pictures in the
first and second data streams are associated with the same
10 video picture.

19. (Original) The data processing method of claim 12,
further comprising steps of:

acquiring the video signal; and

15 acquiring an audio signal,

wherein the step of generating the first data stream and
the step of generating the second data stream include
generating the first and second data streams such that each
said stream further includes the audio signal.

20. (Original) The data processing method of claim 11,
further comprising steps of:

receiving an instruction on the playback order of the
first data stream; and

5 writing the first playlist information, the second data
stream and the second playlist information on the storage
medium,

wherein the step of acquiring the first playlist
information includes producing the first playlist information
10 in accordance with the instruction, and

wherein the step of generating the second data stream
includes generating the second data stream based on the first
data stream.

15 21. (New) A recording medium having stored thereon
a computer program which is executed by a computer in reading
and writing data from/on a storage medium,

the storage medium having stored thereon a first data
stream being represented by a video signal that has been en-
20 coded by a first encoding process,

the computer program instructing the computer to execute
the processing steps of:

acquiring first playlist information which is used to
manage playback of the first data stream;

5 generating a second data stream by encoding the video
signal by a second encoding process, which is different from
the first encoding process;. and

producing second playlist information based on the second
data stream and the first playlist information so as to manage
10 an order in which the second data stream is played back.